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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 32

Application Number: 09/422,758  
Filing Date: October 21, 1999  
Appellant(s): PACKHAM ET AL.

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William E. Booth  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed January 20, 2004.

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**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

It is noted that Appellant has stated that the related appeal is believed to not affect the present appeal.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

No amendment after final has been filed.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Issues***

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows:

Whether claims 1-17, 50-54, 57, and 58 are anticipated by Pranjko.

Whether claims 18, 19, 38, 39, 42, 43, 46, and 47 are obvious in view of Pranjko in view of Packham.

Whether claims 18, 19, 38, 39, 42, 43, 46, and 47 are obvious in view of Pranjko in view of Furuichi.

Whether claims 55 and 56 are obvious in view of Pranjko.

The above changes correspond to the manner in which the claims were finally rejected in the Final Office Action, Paper No. 25. The manner in which the Appellant listed the issues correspond to Appellant's groupings and the related arguments which are not the issues for this section of the appeal.

It is noted that the Examiner withdraws the 35 USC § 101 rejection. Thus this issue is moot.

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 1-19, 38, 39, 42, 43, 46, 47, and 50-58 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *Claims Appealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

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**(9) Prior Art of Record**

M9004739.7	PRANJKO	07-1990
JP 405049760	FURUICHI	03-1993
GB 2,036,631	PACKHAM	02-1980

**(10) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-17, 50-54, 57, and 58 stand rejected under 35 U.S.C. 102(b) as being clearly anticipated by Pranjko (DE M9004739.7). See Fig. 1.

Claims 18, 19, 38, 39, 42, 43, 46, and 47 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Pranjko (DE M9004739.7) in view of Packham (GB 2,036,631 A).

Pranjko discloses the invention substantially as claimed. Although Pranjko does not show an under cutter *per se*, it is the Examiner's position that Pranjko's depicted device would inherently include an under cutter that is oscillatory driven by a driving element due to the fact that the shaving system of Pranjko is a dry shaver with a curved skin engaging surface wherein during operation of the device, a cooperating under cutter is necessary to facilitate the shave. See whole document. However, if it is argued that Pranjko lacks the under cutter and drive element, then Packham clearly teaches a shaving system comprising a curved outer surface 8 which functions as an outer cutter, an under cutter 9 conforming to the outer cutter, and a drive element 4 that oscillates the under cutter for the purpose of providing the positive cutting action for drive shaver systems. See Fig. 2, p. 1, ll. 93-125. Thus, it would have been obvious to the ordinary

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artisan at the time of the instant invention to provide the device of Pranjko with the under cutter and drive element as taught by Packham in order to facilitate positive cutting action of the dry shaver.

Claims 18, 19, 38, 39, 42, 43, 46, and 47 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Pranjko (DE M9004739.7) in view of Furuichi (JP 405049760).

Pranjko discloses the invention substantially as claimed. Although Pranjko does not show an under cutter *per se*, it is the Examiner's position that Pranjko's depicted device would inherently include an under cutter that is oscillatory driven by a driving element due to the fact that the shaving system of Pranjko is a dry shaver with a curved skin engaging surface wherein during operation of the device, a cooperating under cutter is necessary to facilitate the shave. See whole document. In that regard, Furuichi clearly teaches a shaving system comprising a curved outer surface 2 which functions as an outer cutter, an under cutter 3 conforming to the outer cutter, and a drive element e.g. 4 that oscillates the under cutter for the purpose of providing the positive cutting action for drive shaver systems. See whole document. Thus, it would have been obvious to the ordinary artisan at the time of the instant invention to provide the device of Pranjko with the under cutter and drive element that conforms to the shape of the outer cutter as taught and suggested by Furuichi in order to facilitate positive cutting action of the dry shaver, and since with respect to the conforming shape, such a modification would have involved a mere change in the shape of a component. A change in shape is generally recognized as being within the level of ordinary skill in the art, especially since such a change does not render unexpected or unobvious results. *In re Rose*, 105 USPQ 237 (CCPA 1955).

Claims 55-56 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Pranjko (DE M9004739.7).

Pranjko discloses the invention substantially as claimed including what appears to be same material curved regions and end cheek regions. However, if it is argued that Pranjko lacks this feature, then it would have been obvious to the ordinary artisan at the time of the instant invention to provide the device of Pranjko with the same material regions in order to facilitate ease of manufacture due to the same material being used to produce the same, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

**(11) Response to Argument**

**Re: Pranjko Is Not An Enabling Reference**

In response to Appellant's basic argument that Pranjko is non-enabling,<sup>1</sup> this argument is traversed.

First, Pranjko is a reference that the Appellant cited in the IDS filed on September 25, 2000, Paper No. 9. The fact that the Appellant had submitted this reference carries a presumption that the reference is enabling. Under 37 CFR §1.56, the Appellant fulfilled the Appellant's duty to disclose information that is material to the patentability of the invention in the manner prescribed by §§ 1.97(b)-(d) and 1.98.<sup>2</sup>

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<sup>1</sup> Brief, p. 7, l. 2 - p. 11, l. 25.

<sup>2</sup> 37 CFR § 1.56 states in relevant part "The duty to disclose all information known to be material to patentability is deemed to be satisfied if all information known to be material to patentability of any claim issued in a patent was cited by the Office or submitted to the Office in the manner prescribed by § 1.97(b)-(d) and 1.98."

Therefore, any of the references that the Appellant cites is presumed to be enabling to the extent that they are presumed to be material to the patentability of the invention. If, as Appellant argues, the Pranjko reference is not enabling, then it is not clear why the reference was cited by the Appellant in the beginning. In other words, how would a non-enabling reference be material to the patentability of the invention?

Second, the Appellant's arguments of non-enablement is couched in the assertion that Pranjko provides no description, i.e. written description, of how the shaver - shaving blade (of an electric shaver) of Pranjko is made, i.e. method or technique of fabrication. The claims at issue are apparatus claims. Thus, the method or technique of fabrication is not germane to the claimed structure especially in light of the fact that the anticipated claims relate to the shape of the shaving cutter as opposed to any structure that are combined in some claimed manner where the fabrication may necessitate consideration.<sup>3</sup> Moreover, it is well settled that the drawings of a reference may be used to anticipate the claims. *In re Mraz*, 455 F.2d 1069, 173 USPQ 25 (CCPA 1972). However, the picture must show all the claimed structural features and how they are put together. *Jockmus v. Leviton*, 28 F.2d 812 (2d Cir. 1928). In this instance, the relevant claims and the features recited therein are clearly shown in the Figures of Pranjko. Moreover, one skilled in the art would recognize that the Pranjko's drawings show that the shaving head is formed in some manner which satisfies the "how" as set forth in *Jockmus v. Leviton*. The drawings must be evaluated for what they reasonably disclose and suggest to one of ordinary skill in the art. *In re Aslanian*, 590 F.2d 911, 200 USPQ

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<sup>3</sup> Expansion of this point will be presented in relation to the Appellants arguments of anticipation and/or obviousness.

500 (CCPA 1979). It is respectfully noted to the Board, that in this situation, the formation of the shape in Pranjko need not be the same as the Appellant's method, since nothing in the law requires that the same method must be disclosed in order to anticipate the apparatus claims.

Third, Appellant's reliance on Halifax must fail simply by the fact that that decision relates to methods of manufacture instead of the structure. However, even if Halifax is somehow convincing, it is not applicable to the claims at bar. As noted *supra*, the relevant claims set forth a shape. There is no requirement in the claims to consider the tool or technique of manufacturing this shape. Even if this must be considered, one skilled in the art would recognize that the shape claimed by the Appellant and anticipated by Pranjko, at the time of the instant invention, may be formed by a molding process. For example, it is known to the general public that many different plastics or metals may be used to form a myriad of different shapes in molds. Therefore, it is not clear why Appellant's disclosure would be the only means to form the claimed shape.

Fourth, Appellant is basically couching majority of the arguments on improper hindsight reasoning. This argument does not apply to anticipation. Even if it did, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the Appellant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). This applies to all of Appellant's assertions of hindsight.



**Re: Pranjko Does Not Anticipate Independent Claims 1, 16, 17, and 50**

In response to Appellant's basic argument that Pranjko does not anticipate the claimed invention because it is a design patent with no written description,<sup>4</sup> this argument is traversed. It is irrelevant whether or not there is a written description with respect to the drawings shown in Pranjko, since these drawings clearly show the structure being claimed. *In re Mraz*, 455 F.2d 1069, 173 USPQ 25 (CCPA 1972). Moreover, Appellant's arguments are couched in the issues raised for Pranjko as allegedly being non-enabling. In that regard, these points must fail for substantially the same reasons the Examiner set forth *supra*. Furthermore, claim 1 is an apparatus claim and merely requires a skin-engaging surface having both a convex elliptic region and a hyperbolic region, i.e. a shape. "Shape" by definition is a design. Because of the "banana" shape of Pranjko's design, Pranjko clearly anticipates the shape claimed in claim 1. For example, the top view in Pranjko shows the "banana" shape. A curvilinear imaginary centerline, e.g. similar to the Appellant's centerline (117) shown in Fig. 1, shows that the top region (above the centerline) is convex elliptic and the bottom region (below the centerline) is hyperbolic.<sup>5</sup> The Appellant asserts that Pranjko does not show smooth curves and that Pranjko may include dips of some kind,<sup>6</sup> yet it is not clear to the Examiner how the drawings Pranjko must be construed in that manner. The top and side views in Pranjko clearly shows smooth curves and there is nothing in Pranjko that would lead one skilled in the art that that there are dips of any sort. Therefore, Appellant's arguments based upon these alleged lacking features must fail.

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<sup>4</sup> Brief, p. 11, l. 24 - p. 15, l. 15.

<sup>5</sup> Note Appellant's summary of the invention on p. 3 of the Brief.

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In regards to Appellant's arguments with respect to claim 16,<sup>7</sup> these arguments are traversed. Appellant's arguments are couched in the unfounded allegations that Pranjko includes flat portions and dips which the Examiner addressed *supra*. Furthermore, whether or not Pranjko merges seamlessly is irrelevant, since the claim does not require such consideration. As for the limitations of the claim, this is clearly seen in top and side views of Pranjko. The claimed first region is the same as the "hyperbolic region" of claim 1, and the claimed second region is the same as the "convex elliptic region" of claim 1. Therefore, the drawings of Pranjko clearly show and anticipates the claimed radii relationship.

In regards to Appellant's arguments with respect to claim 16,<sup>8</sup> these arguments are traversed. Appellant's arguments are couched in the unfounded allegations that Pranjko includes flat portions and dips which the Examiner addressed *supra*. As for the limitations of the claim, this is clearly seen in top and side views of Pranjko. The claimed first region is the same as the "hyperbolic region" of claim 1, and the claimed second region is the same as the "convex elliptic region" of claim 1. Therefore, the drawings of Pranjko clearly show that the hyperbolic region is concave in one plane, i.e. the bottom portion as shown in the top view, and the convex elliptic region is convex in both planes since that region is a convex shape extending through an arc. The fact that there is no discontinuity between the regions clearly anticipates the limitation "merges seamlessly."

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<sup>6</sup> Brief, p. 12, ll. 18-24.

<sup>7</sup> Brief, p. 12, l. 25 - p. 13, l. 8.

<sup>8</sup> Brief, p. 13, ll. 9-21.

In regards to Appellant's arguments with respect to claim 50,<sup>9</sup> these arguments are traversed. The Appellant argues that Pranjko does not have the end regions as part of the "shaving cutter," yet it is not clear to the Examiner how this is possible. Clearly Pranjko's teachings relate to a shaving cutter, and the housing thereof is part of the cutter. Moreover, the perforated region with the complex shape merges with the end regions in the same curvilinear plane. Therefore, they are part of the "cutter" contrary to Appellant's assertions. The Appellant also alleges that the "dark" lines indicate an abrupt change and therefore do not merge smoothly. However, how is this reconciled by the similar dark lines between the end regions and the central region as shown in Fig. 1 of the application? If the Examiner is to apply the same logic to Appellant's Fig. 1, then the claimed "merges smoothly" would not be present in Appellant's disclosed invention. Furthermore, the continuity of the outline shape as shown in the top view of Pranjko, the fact that the two end regions and the central region are connected to make a whole (e.g. banana shape), and the back view showing the different regions would indicate that there is in fact a smooth merger between the regions.

In response to Appellant's basic argument that the Examiner errs by drawing too much inference from the drawings of Pranjko,<sup>10</sup> this argument lacks merit. The dimensions or scale of the drawings is not the issue. The claims at bar claim, very broadly, a shape. No matter what the scale of Pranjko may be, Pranjko clearly shows and thereby anticipates the claimed shapes, i.e. regions. Moreover, no improper inferences have been made with respect to the drawings, and in this case, there are no

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<sup>9</sup> Brief, p. 13, l. 22 - p. 14, l. 3.

<sup>10</sup> Brief, p. 14, l. 25 - p. 15, l. 11.

exceptional circumstances with respect to the claimed features such that “caution” and considerations of “scale” are necessary.

It is noted by the Examiner that the Appellant’s allegations that the Examiner failed to explain where the features of the claim are described in Pranjko is without merit to the extent that it is the Examiner’s opinion that the Figures of Pranjko is sufficiently descriptive to one skilled in the art to read the claimed limitations in Pranjko in light of Appellant’s disclosure. If the Appellant is referring to a written description thereof, this issue has been addressed *supra*.

**Re: Pranjko Does Not Anticipate Independent Claims 5, 6, and 10**

In response to Appellant’s basic argument that Pranjko does not anticipate claims 5, 6, and 10,<sup>11</sup> this argument is traversed. The term “region” is broad. As such, these limitations have been correctly read in a reasonably broad manner with respect to Pranjko. In that regard, the regions below and surrounding the “grill” and the end regions anticipate these limitations of the skirt. Moreover, it is not clear how Pranjko lacks these regions. Pranjko’s Figures clearly show concave parabolic, convex parabolic, convex elliptic, etc. areas. It is also noted that Pranjko’s depiction shows a “banana shape” as referred to in the application disclosure (e.g. p. 7, ll. 22-24). Thus, to what extent must these regions/areas be to *not* anticipate the claims? The claims do not say. Therefore, Appellant’s arguments must fail. Furthermore, the “cutter” as a matter of interpretation is not limited to the “center region” as the Appellant argues. The claims are broad. They do not set forth anything specific to limit what a shaving cutter must

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be, i.e. what other apparatus features must be included or excluded outside of the skin engaging surface to be considered as reading on the claimed “cutter”? The Examiner construes the top view of Pranjko as the main portion of the cutter. However, the overall device is also construed as the cutter. Nothing in the claims contradicts this reading of Pranjko.

It is noted that Appellant’s arguments of obviousness is not germane to the issue of anticipation.

**Re: Claims 18, 19, 38, 39, 42, 43, 46, and 47 Are Not Obvious over Pranjko in view of Packham**

In response to Appellant’s basic argument that the above noted claims are not rendered obvious by Pranjko in view of Packham,<sup>12</sup> this argument is traversed. It is a well known basic and wholly obvious fact to the ordinary artisan in the shaving art that the device depicted in Pranjko is a dry shaver. It is also a well known obvious fact to the ordinary artisan in the shaving art that the dry shaver must include an under cutter to cooperate with the foil (or the “grill” as Appellant refers) to cut hairs that insert into the holes on the foil. The Board’s attention is respectfully drawn to the teachings of Furuichi which clearly shows such an arrangement in Fig. 1(c). Therefore, while the Examiner acknowledges that a variety of under cutter designs may be available in the art, the fact remains that Pranjko must necessarily include one in an operating device. Hence, Pranjko provides a *prima facie* case of obviousness for an under cutter for which

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<sup>11</sup> Brief, p. 15, l. 16 - p. 17, l. 22.

<sup>12</sup> Brief, p. 17, l. 23 - p. 18, l. 19.

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Packham clearly teaches and renders obvious the claims. Moreover, with regard to the “conforming shape” of the under cutter, Packham clearly teaches that the shape of the under cutter conforms to the shape of the outer cutter. Due to this fact, it is obvious to the ordinarily skilled artisan in the shaving art that the Examiner’s proposed modification would also necessarily include conformance of the under cutter taught and suggested by Packham to that of the outer cutter depicted in Pranjko. Furthermore, in response to Appellant’s assertion that the so called “mismatch” would somehow preclude the combination, i.e. difficulty in incorporating the teachings of the secondary reference, Appellant is reminded that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

**Re: Claims 19, 39, 43, and 47 Are Not Obvious over Pranjko in view of Packham**

In response to Appellant’s basic argument that the above noted claims are not rendered obvious by Pranjko in view of Packham,<sup>13</sup> this argument is traversed. This argument is couched in the assertions made with respect to, e.g. claim 18, and the shape of the undercutter. However, it should be recognized that if the undercutter conforms to

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<sup>13</sup> Brief, p. 18, ll. 20-26.

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the shape of the outer cutter, then both “cutters” would include the corresponding arcuate longitudinal center line.

**Re: Claims 18, 19, 38, 39, 42, 43, 46, and 47 Are Not Obvious over Pranjko in view of Furuichi**

In response to Appellant’s basic argument that the above noted claims are not rendered obvious by Pranjko in view of Furuichi,<sup>14</sup> this argument is traversed. It is a well known basic and wholly obvious fact to the ordinary artisan in the shaving art that the device depicted in Pranjko is a dry shaver. It is also a well known obvious fact to the ordinary artisan in the shaving art that the dry shaver must include an under cutter to cooperate with the foil (or the “grill” as Appellant refers) to cut hairs that insert into the holes on the foil. The Board’s attention is respectfully drawn to the teachings of Furuichi which clearly shows such an arrangement in Fig. 1(c). Therefore, while the Examiner acknowledges that a variety of under cutter designs may be available in the art, the fact remains that Pranjko must necessarily include one in an operating device. Hence, Pranjko provides a *prima facie* case of obviousness for an under cutter for which Packham clearly teaches and renders obvious the claims. Moreover, with regard to the “conforming shape” of the under cutter, Furuichi clearly teaches that the shape of the under cutter conforms to the shape of the outer cutter. Due to this fact, it is obvious to the ordinarily skilled artisan in the shaving art that the Examiner’s proposed modification would also necessarily include conformance of the under cutter taught and suggested by Furuichi to that of the outer cutter depicted in Pranjko. Furthermore, in

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response to Appellant's assertion that the so called "mismatch" would somehow preclude the combination, i.e. difficulty in incorporating the teachings of the secondary reference, Appellant is reminded that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

**Re: Claims 19, 39, 43, and 47 Are Not Obvious over Pranjko in view of Furuichi**

In response to Appellant's basic argument that the above noted claims are not rendered obvious by Pranjko in view of Furuichi,<sup>15</sup> this argument is traversed. This argument is couched in the assertions made with respect to, e.g. claim 18, and the shape of the undercutter. However, it should be recognized that if the undercutter conforms to the shape of the outer cutter, then both "cutters" would include the corresponding arcuate longitudinal center line.

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<sup>14</sup> Brief, p. 19.

<sup>15</sup> Brief, p. 20, ll. 1-7.



**Re: Claims 55-56 Not Obvious over Pranjko**

In response to Appellant's basic argument that the above noted claims are not rendered obvious by Pranjko,<sup>16</sup> this argument is traversed. This argument is couched in the assertions made with respect to the enablement issue addressed above. Therefore the Examiner's comments therein apply. Moreover, the Appellant fails to address the fact that Pranjko's device is inherently made of some sort of material which provides a *prima facie* case of obviousness for specific materials.

**Re: Pranjko Does Not Anticipate Dependent Claims 57-58**

In response to Appellant's argument that Pranjko does not anticipate claims 57-58,<sup>17</sup> this argument is traversed. Pranjko anticipates this claim because there is no stress acting on the device depicted in Pranjko. Moreover, although Appellant's reliance on Tanahashi (US 4,493,149) is noted, how the "grill" in Pranjko is made is not germane to the claims at bar as noted numerous times above.

**Re: Double Patenting**

As noted *supra*, the Examiner withdraws this issue.

For the above reasons, it is believed that the rejections should be sustained.

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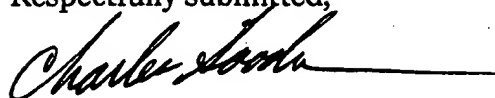
<sup>16</sup> Brief, p. 20, ll. 8-17.

<sup>17</sup> Brief, p. 20, l. 18 - p. 21, l. 5..


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Respectfully submitted,

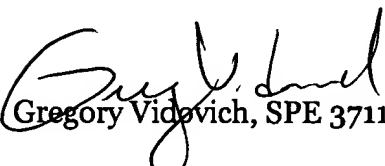


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